Paper No. 28

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte KIYOTO MARUOKA,
AKIHIRO NAKAHARA and KAZUO HOCHI

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Appeal No. 2002-0970
Application 09/181,814

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ON BRIEF[1]

_____

Before COHEN, MCQUADE, and NASE, Administrative Patent Judges.

MCQUADE, Administrative Patent Judge.

DECISION ON APPEAL

Kiyoto Maruoka et al. appeal from the final rejection (Paper No. 19) of claims 1 through 12, all of the claims pending in the application.

THE INVENTION

The invention relates to a hollow golf ball described by the

performance (see page 1 in the specification). Representative claim 1 reads as follows:

> 1. A hollow golf ball comprising:
> a hollow core composed of a hollow portion and at least one hollow core outer layer defining the hollow portion and formed from a composition comprising a rubber component, a resin component or mixtures thereof, and
> a cover formed on the hollow core outer layer, wherein, when a secondary natural frequency of the hollow golf ball is expressed as X (kHz) and a deformation amount, when applying from an initial load of 10 kgf to a final load of 130 kgf on the hollow golf ball, is expressed as Y (mm), the difference of X-Y is within the range of 0.1 to 1.5.[2]

THE REJECTIONS

Claims 1 through 12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,150,906 to Molitor et al. (Molitor), and in the alternative under 35 U.S.C. § 103(a) as being obvious over Molitor.

Attention is directed to the appellants' main and reply briefs (Paper Nos. 22 and 24) and to the examiner's answer (Paper No. 23) for the respective positions of the appellants and the examiner regarding the merits of these rejections.

DISCUSSION

Molitor discloses a golf ball 10 composed of an external hollow shell 14 and a unitary internal core 12 made of either liquid or solid material (see Figures 1 through 4). Although the reference goes into considerable detail as to the composition of these components and the manner in which the ball is manufactured, it does not mention, let alone attach any importance to, the secondary natural frequency of the ball.

In rejecting independent claims 1 and 11[3] under §§ 102(b) and 103(a), the examiner finds (see pages 3, 4, 6 and 7 in the answer) that Molitor's golf ball expressly meets the limitations in these claims requiring "a hollow core composed of a hollow portion and at least one hollow core outer layer defining the hollow portion," and inherently meets the limitations relating to the "secondary natural frequency." Neither of these findings is well taken.

The examiner's determination that the "hollow core" limitation is met rests on the proposition that "Molitor

page 3). The shell 14, however, does not comprise the core of Molitor's golf ball. In this regard, Molitor expressly distinguishes the shell 14, which actually corresponds to the "cover" set forth in claims 1 and 11, from the core 12 of the ball. The core 12, which as indicated above is a unitary element made of either liquid or solid material, simply does not constitute "a hollow core composed of a hollow portion and at least one hollow core outer layer defining the hollow portion" as recited in claims 1 and 11 under any reasonable meaning of this language.

This structural difference between the core recited in claims 1 and 11 and that disclosed by Molitor also undermines the examiner's related contention that the "secondary natural frequency" limitations are met under principles of inherency. The examiner's rationale here is that because the core of Molitor's ball is structurally identical to the core set forth in the appellants' claims, a sound basis exists for concluding that the Molitor ball inherently possesses the secondary natural

Molitor still would not provide a reasonable basis for the examiner's position on the inherency issue. Molitor's deficiencies in this regard are perhaps best highlighted by the examiner's observation that any attempt by the appellants to show that the Molitor ball does not inherently possess the claimed secondary natural frequency characteristics "would be difficult since the frequency at which a ball would vibrate depends on numerous variables such as the size of the hollow [core], thickness of the skin, materials, temperature, club face, how the ball is hit, condition of the ball and etc." (answer, page 4). While the asserted effect of at least some of these variables on the secondary natural frequency of a ball is questionable, it is beyond dispute the secondary natural frequency of a ball or any other object is a function of a number of different variables. In short, Molitor simply does not provide the factual basis necessary to support a reasonable finding that the ball disclosed therein has a construction which would inherently possess the secondary natural frequency characteristics set forth in claims 1

Molitor also would not have suggested such a ball to one of ordinary skill in the art, it fails to establish a prima facie case of either anticipation or obviousness with respect to the subject matter recited in independent claims 1 and 11.[4] Accordingly, we shall not sustain the standing 35 U.S.C. § 102(b) rejection and the alternative 35 U.S.C. § 103(a) rejection of claims 1 and 11, and dependent claims 2 through 10 and 12, as being anticipated by or obvious over Molitor.

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SUMMARY

The decision of the examiner to reject claims 1 through 12 is reversed.

REVERSED

IRWIN CHARLES COHEN	)	
Administrative Patent Judge	)	
	)	
	)	BOARD OF PATENT
	)	
	)	APPEALS AND
JOHN P. MCQUADE	)	
Administrative Patent Judge	)	INTERFERENCES
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JEFFREY V. NASE	)	
Administrative Patent Judge	)	

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